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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.    | CONFIRMATION NO. |
|--|-------------|----------------------|------------------------|------------------|
| 10/754,036   | 01/08/2004  | Sean F. Wu           | 67,021-005/03-667      | 6067             |
| 26096  | 7590        | 04/20/2005           | EXAMINER               |                  |
| CARLSON, GASKEY & OLDS, P.C.<br>400 WEST MAPLE ROAD<br>SUITE 350<br>BIRMINGHAM, MI 48009 |             |                      | SAINT SURIN, JACQUES M |                  |
|  |             |                      | ART UNIT               | PAPER NUMBER     |
|  |             |                      | 2856                   |                  |

DATE MAILED: 04/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                    |                             |  |
|------------------------------|------------------------------------|-----------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>10/754,036      | Applicant(s)<br>WU, SEAN F. |  |
|                              | Examiner<br>Jacques M. Saint-Surin | Art Unit<br>2856            |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 January 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. This Office Action is responsive to the amendment of 01/27/05.

### ***Double Patenting***

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-18 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 9, 17 and 18 of U.S. Patent No. 6,615,143. Although the conflicting claims are not identical, they are not

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patentably distinct from each other because the claims if allowed, would improperly extend the "right to exclude" already granted in the patent.

Regarding claim 1, it is simply broader than the claim 1 of the patent ('143) by reciting an obvious variation of words in the limitations of the claims, omitting some words in the limitations while claiming the same subject matter. For example, the claim recites "a method for reconstructing acoustic radiation from an object including the steps of: a) measuring transient acoustic pressure at a plurality of measurement points around the object subject to an arbitrarily time-dependent excitation while claim 1 of the patent '143 recites "a method for reconstructing acoustic radiation from a noise source of unknown geometry including the steps of: a) measuring sound at a plurality of measurement points in a field around the noise source of unknown geometry, the field having at least one reflective surface. Furthermore, claim 1 recites "reconstructing the acoustic pressure at points other than the measurement points based upon the measurements at the plurality of measurement points" while claim 1 of the patent recites "reconstructing the acoustic field at points other than the measurement points". By comparing these two claims, evidently there are some modification in the words and the broadening of certain limitations which makes the claim obvious over the '143 patent as discussed above.

Regarding claims 9 and 18, they are simply broader than to claim 16 of the patent '143 wherein there is an obvious variation of some words and the omission of certain elements in the limitations of the patented claim. As discussed above, although the conflicting claims are not identical, they are not patentably distinct from each other

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because the claims if allowed, would improperly extend the "right to exclude" already granted in the patent.

Regarding claim 17, it is simply broader than claim 19 of the patent '143 and also recites an obvious variation of the words in the limitations of the patented claim. As discussed above, although the conflicting claims are not identical, they are not patentably distinct from each other because the claims if allowed, would improperly extend the "right to exclude" already granted in the patent.

Claims 2-8 and 10-16 are also rejected as being dependent from rejected base claims.

#### ***Response to Arguments***

4. Applicant's arguments filed on 01/27/05 have been fully considered but they are not persuasive.

#### ***REMARKS***

5. In response to Applicant's argument stating that "Applicant's prior patent does not claim or disclose measuring transient acoustic pressure or that object is subject to "arbitrarily time dependent excitation", the Examiner agrees with applicant's argument that the claims of patent '143 does not recite exactly the same limitations of the claims this application, but, as indicated in the last office action there is a variation in the words of the limitations of the claims which are performing the same functions.

Considering Applicant's background invention where it is acknowledged that analyses of transient acoustic radiation are often encountered in engineering applications because most vibrating structures are subject to impulsive or transient

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force excitations, the determination of transient acoustic pressure of applicant's claims would be clearly obvious to one of ordinary skill in the art using Applicant's prior patent. In addition, numerous dependent claims, e.g., claims 14-15, include the limitations "reconstructing field and surface acoustic pressures" whereby these acoustic pressures would not be different when determining the transient acoustic pressures of the present application since the same techniques are used to obtain the desired or expected results.

Moreover page 5, lines 10-12 of Applicant's specification recites the following:

"The present invention can be used to diagnose general noise sources and transmission since in engineering most structures are subject to arbitrarily time-dependent excitations". Therefore, it is evident that the arbitrarily time dependent excitation" claimed and argued by applicant is not novel but a common engineering knowledge. It is the Examiner's position that the obviousness Double Patenting rejection applied over the claims is reasonable and proper. As indicated in the last office action, Applicant can overcome this rejection by filing a Terminal disclaimer.

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the


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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacques M. Saint-Surin whose telephone number is (571) 272-2206. The examiner can normally be reached on Increased Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272 2208. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jacques M. Saint-Surin  
April 16, 2005

  
HEZRON WILLIAMS  
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